

**INPLACE MOISTURE-DENSITY DETERMINATION:
SAND CONE METHOD
Specified Fraction Control**

Location _____ Site No. _____

Watershed _____ Subwatershed _____

Contract No. _____ Contractor _____

Tested by _____ Computed by _____ Checked by _____

Test No.	Date	Location of test			Borrow source, location, and depth	Material classification
		Station	☒ offset	Elevation		

Size of screen for separation _____ Size of sand cone _____

Test No.	Date	Spec. requirements (%)		Test results (%)		Curve No.	Wet density check	
		Moisture range	Compaction	Moisture	Compaction		1-Point	Curve

Remarks _____

Volume Determination	Test No.
1. Bulk density of sand (predetermined) _____	
2. Initial weight of sand, cone, and container _____	
3. Final weight of sand, cone, and container _____	
4. Weight of sand in hole, plate, and cone = (2) - (3) _____	
5. Weight of sand in plate plus cone (predetermined) _____	
6. Weight of sand in hole = (4) - (5) _____	
7. Volume of hole = (6) + (7) _____	
Moisture Determination	
Speedy moisture meter	
8. Dial reading _____	
9. Moisture content (calibration curve) _____ (%)	
Sample tested using: quick dry <input type="checkbox"/> alcohol <input type="checkbox"/> oven <input type="checkbox"/>	Container No.
10. Weight of moist fines plus container _____	
11. Weight of dry fines plus container _____	
12. Weight of moisture = (10) - (11) _____	
13. Weight of container _____	
14. Weight of dry fines = (11) - (13) _____	
15. Moisture content = ((12) + (14)) 100 _____ (%)	
16. Correction for ignition _____ (%)	
17. Corrected moisture content = (15) - (16) _____ (%)	
Density Determination	
18. Weight of moist sample plus container _____	
19. Weight of container _____	
20. Weight of moist fines ¹ plus rock = (18) - (19) _____	
21. Weight of moist rock and container _____	
22. Weight of container _____	
23. Weight of moist rock = (21) - (22) _____	
24. Weight of moist fines = (20) - (23) _____	
25. Wet density of rock (predetermined) _____	
26. Volume of rock = (23) + (25) _____	
27. Volume of fines = (7) - (26) _____	
28. Weight of dry fines = ((24) + (100 + (17))) 100 _____	
29. Dry density of fines = (28) + (27) _____	
30. Maximum dry density of fines (predetermined) _____	
31. Ratio ² = ((29) + (30)) 100 _____ (%)	

¹ Fines are materials smaller than the separating screen specified by the standard method used.

² Ratio of dry density of fines to maximum dry density.

Indicate Weight and Volume Units Used in Test